

# **PSE CONSULTING ENGINEERS INC.**

*ENGINEERING & DESIGN SERVICES*

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*STATEMENT OF QUALIFICATIONS*

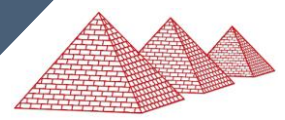


**250 Main St., Ste. A**

**Klamath Falls, OR 97601**

**Office: 541.850.6300 | Fax: 541.850.6233**

**[www.structure1.com](http://www.structure1.com) | [mt2@structure1.com](mailto:mt2@structure1.com)**



***PSE Consulting Engineers Inc. is a Certified Emerging Small Business and Certified Historically Underutilized Business Zone (HUB Zone)***

***One or more of our staff and sub-consultants carry multi-state licenses.  
We can serve you in 47 states!***

**PSE Consulting Engineers Inc.** was formed in 1998 by Dr. Nabil Taha, then a Professor of Engineering at Oregon Institute of Technology (OIT).

Since then, PSE has been providing top quality engineering services out of our main headquarters located in Klamath Falls, Oregon, with a second branch in Medford, Oregon. We are not limited by geographic boundaries thanks to our dedicated professionals who have extensive multi-state licensing and international project experience.



We take tremendous pride in our work as it ensures the safety of lives and property. Our professionals approach each project with great enthusiasm and teamwork. We strive to provide the best services possible to guarantee our client's expectations are not just met but are exceeded. We treat all our clients with the utmost importance and make them our top priority. Building long-term relationships is our belief and our goal. When it comes to quality, PSE never compromises our mission. We ensure each project receives our full commitment to accuracy and professionalism

Our clients include but are not limited to: State and Federal Government, school officials, City and County officials, architects, developers, contractors, and homeowners. Our widely diverse client base gives us insight into how best to engineer and design projects in a manner that will exceed our client's expectations.

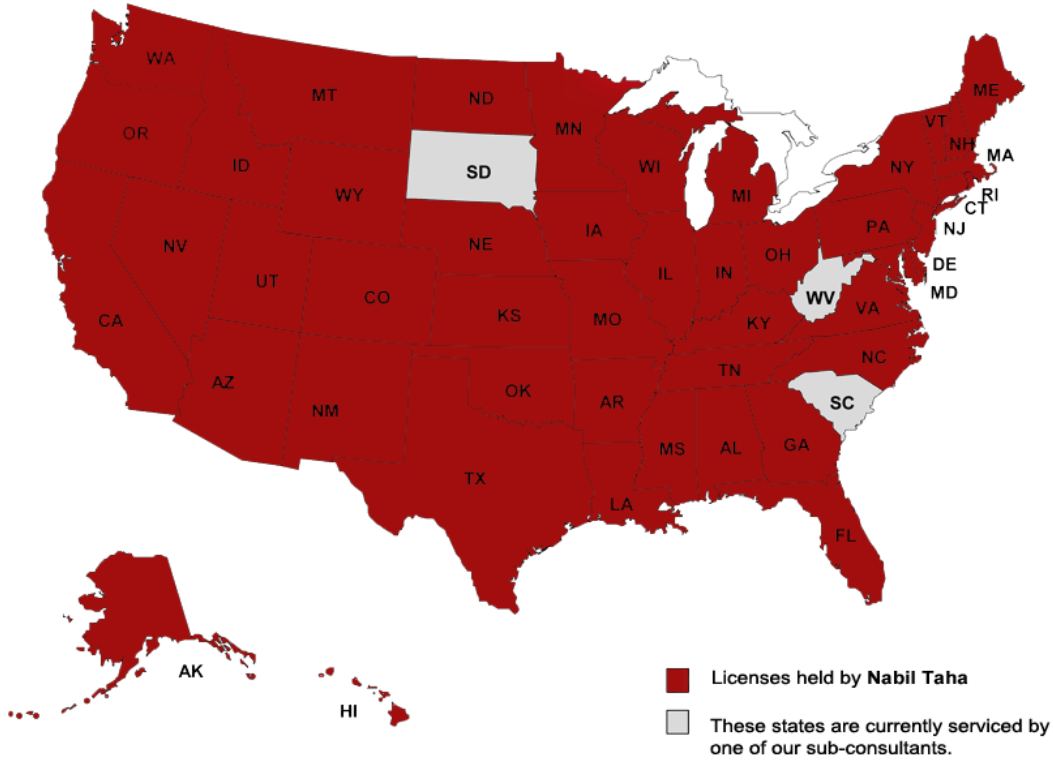
**PSE's** professional team is made up of four Professional Engineers, four Engineers in Training, four AutoCAD Draftsmen, an Office Manager, Bookkeeper, Project Manager and two Marketing Directors.



Each staff member takes time to understand their client's expectations needs, and limitations in order to provide the best services possible. Our staff is equipped with the most advanced software available, and the proper training and experience to undertake any project that comes our way. Additionally, the staff at **PSE** is quite diverse and includes nationalities from all parts of the globe including; Egypt, India, and the U.S. We are proud of our diverse staff and have a strong teamwork approach.

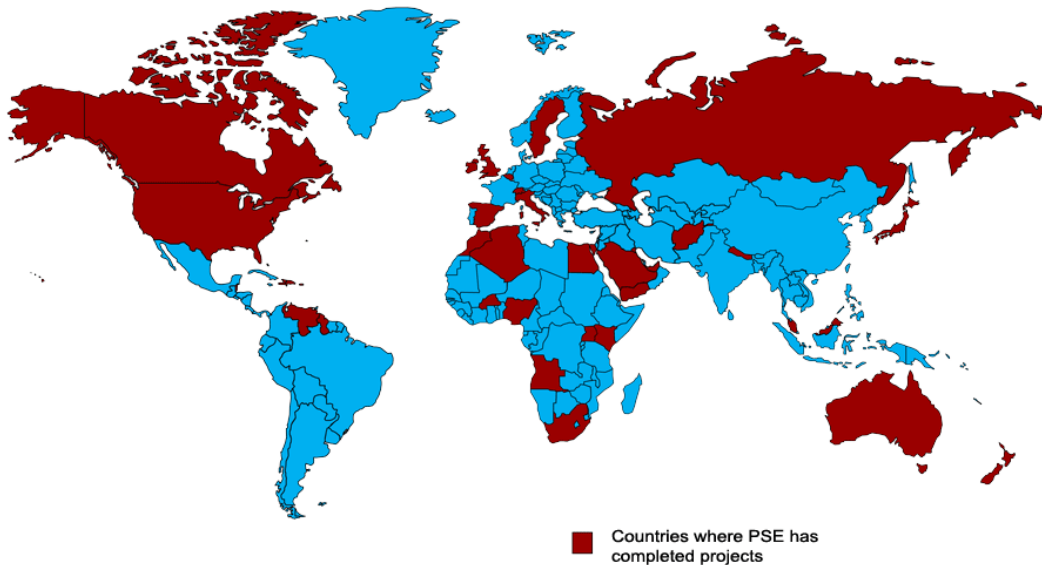


**PSE** is an innovative engineering firm that utilizes existing and emerging technologies to create solutions for beautiful, **sustainable** and safe structures. Our focus has always been, and always will be, to aid in the design and structural integrity of energy efficient buildings.



We are supporters of the **Leadership in Energy and Environmental Design standards (LEED)**. **PSE** has worked with many famous and equally innovative architects, designers, and developers to produce some ground-breaking structures. We provide detailed designs and drawings to facilitate the building process in a timely and efficient manner. Our goal is to continue to grow and provide services for those trying to make their dream project a reality.

## Countries where PSE has completed projects





## ***ENGINEERING, DRAFTING & DESIGN SERVICES***

**PSE Consulting Engineers Inc.** is in the business of designing structures for the future, today. We have a wide range of capabilities enabling us to perform engineering, drafting and design for anything the imagination can conjure.

As one of the few US based structural engineering firms focusing on **green design**, we represent the pioneering spirit of trying something new. If it's not in the books we'll work with it to meet all standards and add it to the books. Grounded in tradition we meet the future through innovation. **PSE** provides engineering for Commercial, Residential, and Industrial projects.

### **SERVICES**



- **Structural & Civil Engineering**
- **Seismic Upgrades & Retrofits**
- **Renovations & Additions**
- **Evaluations & Inspections**
- **Foundation Design**
- **Construction Inspections**
- **Peer Review & Quality Control**
- **Consulting**
- **Home design**
- **Construction Administration**



### **TRADITIONAL STRUCTURES**

- **Office Buildings**
- **Banks**
- **Shopping Centers**
- **Hospitals**
- **Educational Institutions**
- **Hotels**
- **Steel Structures**
- **Masonry Construction**
- **Timber/Wood Structures**
- **Log Homes/Buildings**
- **Pole Buildings**
- **Bridges**
- **Swimming Pools**





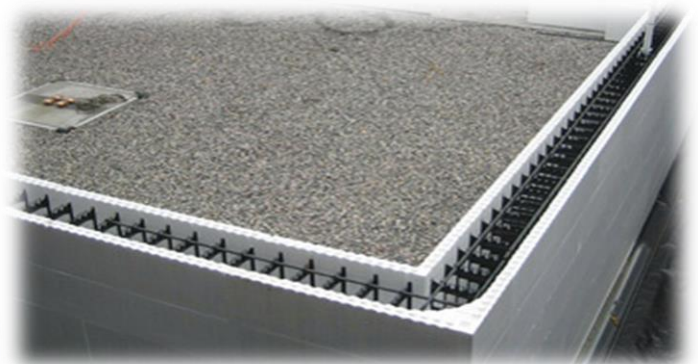
**LEADERS IN SUSTAINABLE ENGINEERING AND DESIGN**



- Rammed Earth
- Shipping/Cargo Containers
- Bamboo
- Ferrocement
- Straw-Bale
- Structurally Insulated Panels (SIPS)
- Earth Bag
- Insulated Concrete Forms (ICF)
- Light Gauge Steel
- Fabric Structures
- Round Homes
- Adobe
- Cob



...and much more





***PSE will not shy away from any type of project. Our team has helped hundreds of clients obtain building permits for many unique projects, without any headache or setbacks.***



***UNIQUE STRUCTURES***

- Domes
- Yurts
- Modular homes & buildings
- Treehouses
- Tiny Homes
- Waterslides
- Ziplines
- Ferrocement

***ALUMINUM***

- Store Fronts
- Canopies & Awnings
- Pergolas
- Fabric Covered Aluminum
- Aluminum Trusses
- Passenger Waiting
  - Public Transport
  - Rail Stations





***EXPERTS IN SELF-STORAGE ENGINEERING & DESIGN***

***PSE understands the importance of design when it comes to Self-Storage Facilities. Our team of engineers have the flexibility of a smaller firm but the expertise you would get from a larger firm. This will ensure the most innovative and economical engineering design possible.***

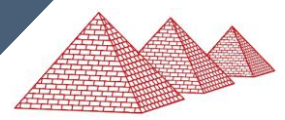


***EXPERIENCE WITH DIFFERENT BUILDING MATERIALS***

- Concrete
- Masonry
- Light Gauge/Cold Formed Steel



***PSE HAS DESIGNED A NUMBER OF FACILITIES, RANGING FROM 20,000 TO 250,000 SQUARE FEET***

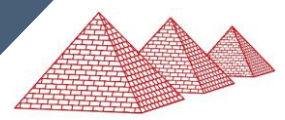


## WHY CHOOSE PSE CONSULTING ENGINEERS INC.?

- **Free** initial consultation
- **Your satisfaction** is our top priority. If you are not satisfied, neither are we.
  - **96%** of our clients give us excellent or very good ratings on the services they have received from us.
  - **93%** of our clients say they would recommend our company to others.
  - **91%** of our clients give us excellent or very good ratings on our meeting their deadlines.
- **We understand** that where you work and live requires versatility and flexibility to accommodate personal preferences. By listening to your needs and using state-of-the-art software, experience, and innovation we create buildings that;
  - Are the most economical, effective, and safest structural system currently available.
  - Ensure a timely successful completion.
- **We have extensive experience** in engineering both traditional and environmentally sustainable buildings. We engineer **ALL** types of **green homes & buildings**. Many engineers will not touch a project unless it is already in a book. We are rewriting the book by building with vision and hands-on experience.
- **PSE offers a commitment** to engineering excellence. Whether your project is a standard garage or unique like a structure built out of shipping containers, or a treehouse; we provide our clients with high caliber efficiency, talent, and expertise.
- **No job is too big or too small** for our team. What you need is what we do.
- **Innovation** is the root of **PSE**. We engineer what you want, just for you.







## QUALITY CONTROL FOR DESIGN

Our commitment to quality control during all phases of the design process is met through open communication with all members of the Design Team. A thorough understanding of the needs at hand and how we, *as a team*, can meet those needs with concrete solutions that *work*. Each project not only requires the highest level of professionalism and expertise, but must be designed with longevity in mind; a quality design will outlast and out-perform inferior products or services, and will not only be a positive investment for the client, but an asset and integral part of the structure over time.



### OUR STEPS FOR ENSURING QUALITY CONTROL ON EVERY PROJECT

- 1. Initial meeting with client** - First and foremost, we meet with the client to listen to his/her wants, needs, and requirements.
- 2. Initial staff meeting** – Second comes an initial staff meeting between the lead engineer and the project manager.
- 3. The Engineering Manager** – will lay out the overall structural system and considers any alternatives.
- 4. Engineering Manual** - Covers almost everything the engineers will need to develop high quality construction documents. Starting from where to get the load and load pass, to design. Our Engineering Manual acts as a comprehensive resource to guide our Engineers throughout the project development; with its clear-cut standards of excellence and demonstrative calculative examples and guidelines.
- 5. Progress meetings** – The number of meetings varies based on the size of each project, but meetings are conducted throughout the design process on a regular and as-needed basis. This is where alternatives are presented, troubleshooting occurs (if any), and Value Engineering.
- 6. Checklists** – Checklists are an extremely important part of design quality control. This prevents any steps from being missed, ensures all aspects of the document creation are covered, and prevents loss of information and accuracy. Checklists encompass not only design procedures and bullet points, but also the materials used and steps which need to be taken. This will ensure complete integration of design concepts with practical construction application.
- 7. Final engineering review by the Engineering Manager** – This is the meeting where we make a final check to make sure that we have satisfied our clients' and building code requirements.



## FORTRESS OBETZ



PSE Consulting Engineers Inc. provided the structural analysis, design, and detailing for this first-of-its-kind stadium. A new 18,000 square-foot fortress containing offices, concessions stands, and restrooms. The castle-like structure will be three stories tall. Fortress Obetz is one of the most amazing projects PSE has ever been a part of.

This large, one-of-a-kind structure is constructed completely out of shipping/cargo containers. It is one of the largest container projects in the United States, incorporating 122 containers.

**PROJECT OWNER:**

FALCON STRUCTURES

**CONTACT:**

STEPHEN SHANG

512-231-9603

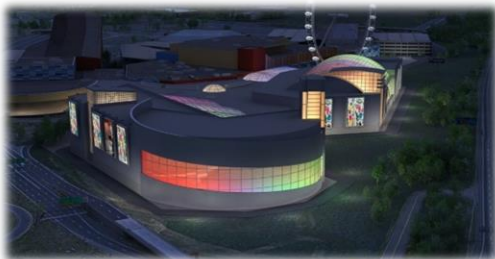
**ENGINEERING:**

2016

**ESTIMATED PROJECT COST:**

\$15 MILLION

## AMERICAN DREAM MALL



PSE Consulting Engineers Inc. is providing the structural review for a 9-million square-foot mall located in East Rutherford, New Jersey. The Mall is composed of, 639,000-square-foot amusement park and water park, the world's tallest "drop ride," and observation wheel with views of Manhattan, and aquarium, an indoor ski slope and ice rinks, a miniature golf course, a performing arts center, and 400 stores and restaurants.

PSE staff have completed thousands of hours of review on this mall since 2014.

**PROJECT OWNER:**

MGA

**CONTACT:**

MAGED GHALI

403-249-9870

**ENGINEERING:**

2014-2016

**ESTIMATED PROJECT COST:**

\$2.65 BILLION

# RATE BREAKDOWN



## PERCENTAGE BREAKDOWN FOR SERVICES:

Conceptual Design	10%
Design Development	20%
Construction Document Design	70%

## SERVICE RATES

*Services shall be charged on a time-and-materials basis according to the rates below:*

Clerical/Accounting - \$69.00/hr	Engineering Design III - \$130.00/hr
AutoCAD Tech I – \$74.00/hr	Licensed Engineer I - \$140.00/hr
Engineering Tech I - \$84.00/hr	Licensed Engineer II – 150.00/hr
Home Designer - \$99/hr	Project Manager - \$170.00/hr
Engineering Design II - \$109.00/hr	Principal Engineer - \$190.00/hr

## ADDITIONAL COPIES

*If additional copies are required other than what is covered in this agreement, the charges for labor and material will be calculated at the rates listed below:*

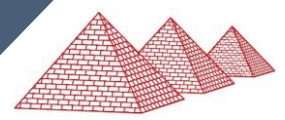
- Original Drawings, 24 x 36 - \$10.00/sheet
- Additional copies of drawings, 24x36 - \$5.00/sheet
- Large prints (11 x 17) - \$1.00/sheet
- 8 ½ x 11 - \$.20/sheet
- Calculations binder (8 ½ x 11), Minimum 1-50 pages - \$30.00
- Calculations binder (8 ½ x 11), 51-100 pages - \$50.00
- Calculations binder (8 ½ x 11), 101 + pages - \$50.00 plus \$.20/sheet for any additional

## ACCELERATED MAILING SERVICES

*If accelerated mailing services are required such as UPS, FedEx, or overnight delivery services, these charges will apply.*

2 day air – \$76.14

Overnight - \$108.50



**NABIL “BILL” TAHA**  
**PH.D., P.E.**

**Principle Engineer**

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**EDUCATION**

**Ph.D.** Civil/Structural Engineering

Kansas State University, 1988

**M.S.** Civil/Structural Engineering

Kansas State University, 1988

**Former Associate Professor of Civil Engineering** Oregon Institute of Technology, Civil Engineering Department

**PROFESSIONAL REGISTRATION**

**Engineer** – California, Oregon, Washington and 44 other states

**AFFILIATIONS**

- American Society of Structural Engineers
- American Society of Civil Engineers
- Klamath County Chamber of Commerce
- Klamath County Home Builders Association

**BACKGROUND**

Nabil (Bill) Taha serves as the President of PSE Consulting Engineers Inc., and is a licensed Structural Engineer. During the past 28-year Bill has been involved in a wide variety of engineering projects. His career has involved many diverse applications of structural engineering and consulting, including design of new structures; design of repairs and modifications to existing buildings, bridges, and other structures; structural peer reviews, investigation of building conditions, performance, and failure; analysis of constructability; evaluation of construction contracts, processes, schedules., and has been on the leading edge in sustainable building projects. He has investigated and diagnosed the causes and consequences of building envelope and structural problems with historic buildings (both traditional and modern), and designing sensitive and appropriate repairs and restorations/rehabilitations to solve those problems.

**PROFESSIONAL SUMMARY**

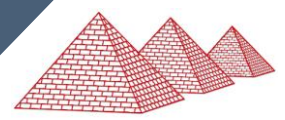
- Nabil oversees, reviews and supervises the structural design of several engineers and designers. He designs and reviews at least 450 structures annually.
- Nabil specializes in projects with shipping/cargo containers and is one of the few in the world that deal with projects involving containers.
- Aside from shipping/cargo containers, he also specializes in Green Buildings. His passion for these building practices has placed PSE Consulting Engineers Inc. at the top of today's green engineering industry.
- Nabil is licensed in 47 states and has provided the engineering for structures all around the U.S and several countries around the world.

**NOTABLE PROJECTS/EXPERIENCE**

Three Quarter Dome for the 2014 Winter Olympics – Sochi, Russia

Fortress Obetz, 122 Shipping Container Structure – Obetz, Ohio – 2016

American Dream Mall, \$2.65 Billion Mixed Development - New Jersey - 2014



## BACKGROUND

Ralph joined the firm in 2002 as an intern and has become a key player at PSE Consulting Engineers Inc. He is experienced in the investigation, analyzing and design of major commercial, institutional and residential buildings. He has developed the structural design of many residential and commercial structures, commonly beginning with architectural drawings. The design process includes developing framing plans, lateral (Wind & Seismic) analysis and design, vertical and horizontal member design, foundation design and development of detail drawings.

## RALPH HALL P.E.

Engineer

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### EDUCATION

B.S. Civil/Structural Engineering

Oregon Institute of Technology, 2005

### PROFESSIONAL REGISTRATION

Engineer –Oregon and 7 other states

### AFFILIATIONS

- American Society of Civil Engineers

### QUALIFICATIONS

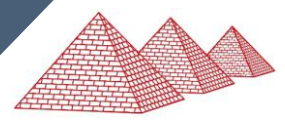
- Licensed in 8 states and has provided engineering for structures all over the U.S. and several other countries throughout the world.

### COMPUTER SKILLS

- AutoCAD 2000 and newer
- Risa 3D
- Risa Foot
- Retain-Pro
- Woodworks Office (including shear walls)
- Microsoft office
- ...and much more

## PROFESSIONAL SUMMARY

- Foundation Design of pre-engineered steel building in states across the nation including: Anchor Bolt Analysis, Reinforced Concrete Design, and Plan Generation.
- Design of portable storage units in both Louisiana and Texas according to the local codes including: Light Gauge Steel Design and Shear Wall Analysis
- Complete Structural Analysis and Design for Commercial, Industrial and Residential Structures including: vertical and lateral analysis and plan generation and modification.
- Design of precast & pre-stressed Hollow core wall & slab, waffle wall and solid wall to sustain wind, seismic and gravity loads.
- Analysis and design of Precast/Pre-stressed girders, columns, and beams.
- Analysis and design of connections for panel-foundation, panel-panel, continuous ledger, steel girder and joist support to carry in plane, out of plane and gravity loading.
- Pier analysis and rigidity calculation of wall to calculate number of foundation and panel connections
- Perform stability analysis and calculate uplift forces
- Lateral force analysis to calculate seismic base shear, in-plane load, out-of-plane load, chord force, and collector force



**ADEL "ADAM"**  
**ELFAYOUMY,**  
**P.E. PH.D.**

**Project Manager**

**EDUCATION**

**Ph.D.** Civil/Structural Engineering

University of Alabama Birmingham,  
2012

Civil/Structural Engineering

University of North Florida, 2011

**PROFESSIONAL REGISTRATION**

**Licensed Professional Engineer** –  
Florida, Texas, Alabama, Kentucky,  
North Carolina, South Carolina,  
Tennessee, Mississippi, Oregon.

**AFFILIATIONS**

- American Society of Structural Engineers
- American Society of Civil Engineers

**BACKGROUND**

Adel is a Project Manager at PSE who joined the industry in 1997 and has experience in diversified aspects of structural engineering analysis, design and management. In addition to a strong technical base and natural structural curiosity, he has a large amount of field experience, which gives him a unique understanding into the total project cycle and needs. He started attending Graduate program at the University of North Florida in January 2011. He also attended graduate program at the University of Alabama at Birmingham in August 2012. He received his PhD in Structural Engineering in Dec. 2014.

**PROFESSIONAL SUMMARY**

Joining PSE in 2015, Mr. Elfayoumy has worked on a diverse range of projects including commercial, residential, bridges, cables structures, membrane structures and bamboo houses. His many years of professional experience instilled in him the passion and ability to solve unique challenges and collaboration with coworkers and clients. Adel is passionate about structural engineering and creating innovative solutions that work for all: structurally, architecturally, constructability, economically, and ultimately the owner and end-user. His academic background and structural engineering experience prepared him to be an effective key person in PSE.

**NOTABLE PROJECTS/EXPERIENCE**

**Steele Residence, Santa Rosa, CA, (July - September 2018)** - A Single-Story residence of 11,246 sq.ft. It includes Insulated Concrete forms (ICF) wall building.

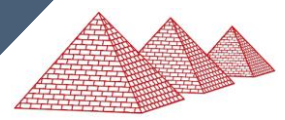
**Admani Residence, Cornelius, NC (August – October 2019)** - This project is 3-story Light Gauge Steel Dwelling of 30,685 sq.ft.

**Garrard Bradley, Meridale, NY (March - April 2018)** - This is a single-story dwelling of 1,620 sq.ft.

**Johnson Controls, City of Charleston, SC (April - June 2018)** - This is a pool enclosure of 17,239 sq.ft. Swimming pool (86'x187') and Entrance (24'x55').

**120-ft steel dome, Temporary Event, Las Vegas, NV (2019)** -

Developed a FEM using RISA3D to simulate steel dome struts, 2 vestibules single entrance tunnel.



**TED STACY**

Via Google my Business

*"We were fortunate to find Precision Structural Engineering, Inc. We have completed numerous projects with them and are looking forward to many more. We have found them to be engaged, eager to understand the scope of our project and have met our very critical lead times. Their professionalism and desire for a long term relationship have made them our first choice."*

**TORI SMILEY**

VP Sales

**Falcon Structures**

*"I cannot say enough good things about the engineers at Precision Structural Engineering. We wouldn't have gotten our latest client without them.*

*Throughout the project they were responsive, incorporated our standard methods into their designs, and produced professional work. Most importantly, they were successful in hitting all of our ridiculously short deadlines. This is the team you want working for you."*

**DR. KATHLEEN LISTON, AIA**

Architect/CEO

**Eco Offsite**

*"This is excellent and the cleanest structural plans I've seen yet. The simplicity and layout is fantastic. I really appreciate it. Thank you!"*

**DAVID EASTON**

**Rammed Earth Works**

*"Perfect. I can't tell you how much I appreciate your creativity and flexibility. This is precisely the kind of relationship with structural that a designer/builder on the cutting edge needs to have.*

*Thank you so very much."*

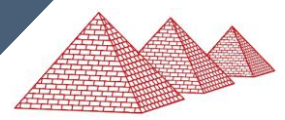
**BOB BIEDERMAN**

Director

**Xtremehomes**

*"It has been a pleasure working with you. You are always responsive, and your work is top-notch. You really make my job a lot easier. Thanks!"*

# REFERENCES



**Derek Mizner**

Owner/Principal

**Mizner Design**

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512.363.3525

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derek@miznerdesign.com

**David Sands, AIA, LEED AP**

Chairman/Chief Architect

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887.857.0057

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david@bamboolive.com

**Spencer Sawtelle**

Project Manager

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ssawtelle@mapes.com

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President

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**Aaron Edwards**

General Manager

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**Heiland Hoff**

*Principle*

**Heiland Hoff Architecture**

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heiland@heilandhoffarchitecture.com

*Feel free to contact any or all of the above references.*